



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,671	03/11/2005	Tetsuo Nakanishi	TAKIT-196	5243

7590 10/01/2008  
Millen White Zelano & Branigan  
Arlington Courthouse Plaza I  
2200 Clarendon Boulevard  
Arlington, VA 22201

EXAMINER
----------

KASSA, TIGABU

ART UNIT	PAPER NUMBER
----------	--------------

4161

MAIL DATE	DELIVERY MODE
-----------	---------------

10/01/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/527,671	<b>Applicant(s)</b> NAKANISHI ET AL.	
	<b>Examiner</b> TIGABU KASSA	<b>Art Unit</b> 4161	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 3, 5, and 7-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/19/08; 9/30/05</u>  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election of with traverse of Group I in the reply filed on July 15, 2008 is acknowledged. In addition, applicant's election of the species of  $M_2D_{40}D^H_2$  as ingredient (a2) and polyglycerol diallylether as ingredient (b1) is also acknowledged. The traversal is on the ground(s) that the search and examination of currently pending claims would not pose an undue burden on examiner since the non-elected groups comprise the polymers of the elected group and the products of the non-elected groups are combinations of the elected group products and other components. This is not found persuasive because of the rationale presented in the restriction requirement mailed June 30, 2008. In response to applicant's election, Group II (claims 7-8), Group III (claims 9-12), and Group IV (claims 13-28 and 29-34) have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Additionally, claims 3 and 5 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicants have elected Group I with traverse. **Claims 1-4 and 6 are under consideration in the instant office action.**

The requirement is still deemed proper and is therefore made FINAL

### ***Status of the Claims***

Claims 1-34 are currently pending and are the subject of this Office Action.

### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119

(a)-(d).

***Information Disclosure Statement***

The information disclosure statements (IDS) submitted on 09/30/2005 and 05/19/2008 was noted and the submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner has considered the information disclosure statement.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-2 are rejected under 35 U.S.C. § 102(b) as being anticipated by Shioya et al. (US Patent No 5,144,054)**

Instant claim 1 recites an organopolysiloxane polymer having a glycerol derivative which can swell up by containing at least its own weight of liquid oil. In other embodiments, such as instant claim 2, the organopolysiloxane polymer obtained by the addition polymerization of the organohydrogen polysiloxane (a2)  $M_2D_{40}D^H_2$  and the glycerol derivative (b1) polyglycerol diallylether as per applicant's species election. Examiner has expanded the species to 10-undecenylglyceryl ether, which is described by Shioya et al. (column 23, line 54, example 10).

Shioya et al. disclose novel siloxane derivatives having surface active action useful as an emulsifier capable of excellent emulsification stability and having good fitness, good slip, **good cosmetic adhesiveness**, and good usage feeling (column 2, lines 6-12). Shioya et al. disclose an organopolysiloxane polymer having a glycerol derivative (column 23, example 10, lines 50-53), which addresses the limitations of instant claims 1-2, specifically the variables recited in instant claim 2, for (a2) where  $1.0 \leq d \leq 2.3$ ,  $0.001 \leq e \leq 1.0$  and  $R^1$  is a substituted or unsubstituted monovalent hydrocarbon group having 1-30 carbon atoms, furthermore, for (b1) where f is an integer from 2-10 and  $R^3$  is an alkenyl group having 2-20 carbon atoms have been addressed by the teachings of Shioya et al..

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

Art Unit: 4161

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness

**Claims 1-2, 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shioya et al. (US Patent No 5,144,054) in view of Harai et al. (European Patent Specification 0350951, IDS reference).**

***Applicant Claims***

Instant claim 1 recites an organopolysiloxane polymer having a glycerol derivative which can swell up by containing at least its own weight of liquid oil. In other embodiments, such as instant claim 2, the organopolysiloxane polymer obtained by the addition polymerization of the organohydrogen polysiloxane (a2)  $M_2D_{40}D^H_2$  and the glycerol derivative (b1) polyglycerol diallylether as per applicant's species election. Instant claim 4 recites in the organopolysiloxane polymer the glycerol derivative as per applicant's species election (b1) is a polyglycerol diallylether of the structure provided in the instant claim where s is an integer from 1-20. Instant claim 6 recites the organopolysiloxane polymer comprises organohydrogen polysiloxane a(2)  $M_2D_{40}D^H_2$  and glycerol derivative b(1) polyglycerol diallylether having an alkenyl group.

***Determination of the Scope and Content of the Prior Art (MPEP §2141.01)***

The teachings of Shioya et al. have been set forth above in the instant office action and are herein incorporated by reference.

Harai et al. disclose a silicone rubber adhesive comprising a silicone rubber composition comprising an organohydrogen polysiloxane component (page 3, line 6) and a partial allyl ether of a multivalent of alcohol component which functions to impart tack (adhesiveness) to the uncured adhesive, and with other components of the composition to improve the durability of adhesion for various substrates (page 4, lines 6-9). Harai et al. disclose an example of polyglycerol diallylether **diglycerol diallyl ether** (page 4, line 13).

***Ascertainment of the Difference Between Scope the Prior Art and the Claims (MPEP §2141.012)***

Shioya et al. lacks the teaching of the glycerol derivative polyglycerol diallylether. This deficiency is cured by the teachings of Harai et al.

***Finding of Prima Facie Obviousness Rational and Motivation (MPEP §2142-2143)***

It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Shioya et al. and Harai et al., because Harai et al. teach that in a composition comprising organohydrogen polysiloxane component (page 3, line 6) the incorporation of a partial allyl ether such as **diglycerol diallyl ether** (page 4, line 13) of a multivalent of alcohol component functions impart tack (adhesiveness) to the uncured adhesive and with other components of the composition improves the durability of adhesion for various

Art Unit: 4161

substrates (page 4, lines 6-9). The skilled artisan would be motivated to combine the teachings, because imparting tack (adhesiveness) to the organohydrogen polysiloxane allows these polymers to be useful emulsifiers with excellent emulsification stability with good cosmetic adhesiveness. It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Shioya et al. and Harai et al., because it is desirable to utilize for example **diglycerol diallyl ether** which has two available double bonds for polymerization, since one of the double bond can cross-link to the organohydrogen siloxane polymer and the other one would be available for further cross-linking and polymerization. A skilled artisan would have had a reasonable expectation of success upon combination of the prior art teachings, because both of the teachings comprise a similar organohydrogen siloxane polymer and glycerol derivative components. Furthermore, both teachings strive for a better organohydrogen siloxane polymer with excellent adhesiveness for various purposes. Therefore, the claimed invention, as a whole, would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, because the combined teachings of the prior art is fairly suggestive of the claimed invention.

### **Conclusion**

Claims 1-34 are rejected, while claims 3, 5, and 7-34 are withdrawn. No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **TIGABU KASSA** whose telephone number is (571)270-5867.

Formatted: Font: Bold

The examiner can normally be reached on 9 am-5 pm Monday-Friday.



Art Unit: 4161

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Nolan can be reached on 571-272-0847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tigabu Kassa

9/20/08

/John Pak/  
Primary Examiner, Art Unit 1616

Formatted: Line spacing: single